

STATE OF CALIFORNIA - THE RESOURCES AGENCY

GRAY DAVIS, Governor

## CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET  
SACRAMENTO, CA 95814-5512

January 11, 2000

Mr. John Sattler  
U.S. Department of Energy  
Fernald Environmental Management Project  
P.O. Box 638706  
Cincinnati, Ohio 45263-8706

Dear John:

Thank you for sending the draft letter dated January 10, 2000, for our review and comment. We appreciate your efforts in working with states to accommodate their concerns regarding the rerouting of these low-level radioactive waste shipments to the Nevada Test Site.

Although the revised draft letter is an improvement over the first draft, particularly the increased information about the shipments, it still does not adequately address California's concerns. These concerns include: the potential lack of timely emergency response to an accident along SR 127, the fact that SR 127 was not engineered and constructed to handle numerous heavy truck loads, the precedent such rerouting to avoid Las Vegas could set for other nuclear waste shipments, and that it is the main tourist access road to Death Valley National Park. California continues to oppose DOE's proposed rerouting through California thousands of low-level radioactive waste shipments from eastern states to the Nevada Test Site. Our specific comments on the letter follow.

1. We appreciate the fact that the revised DOE-Fernald letter now includes a statement that bad weather or other special conditions may cause a particular route not to be used during a period of time, such as during high potential for flash flooding and seasonal tourist traffic. However, this statement needs further clarification in terms of how these "periods of time" will be identified. It should be changed to: "trucks will avoid peak tourist times, as defined by Inyo County and the Death Valley National Park". We also need clarification on procedures for notifying truckers of emergency conditions such as flash floods.
2. The draft letter does not adequately address limited first responder emergency response capability along SR 127. We are very concerned about the remote and limited emergency response capability along SR 127 for accidents involving radioactive materials. Inyo County noted that assistance with roadway incidents must come from the Inyo County Sheriff Unit at Shoshone, Park Service Rangers dispatched out of Cow Creek near Furnace Creek, or the Highway Patrol out of Death Valley or out of Pahrump, Nevada. Most of the route lies 1-3 hours from any public assistance. To deal with major roadway incidents, County Sheriff units are sent from Lone Pine, which is three hours away from the closest segment of SR 127.

Currently the SR 127 towns of Tecopa, Shoshone, and Death Valley Junction are served by a single Volunteer Fire Protection District that is without any funding. In case of a serious radiological release in Inyo County, specialist response teams would be brought in from either San Bernardino or Bakersfield, which would take at least 3-4 hours. The closest medical facility is in Pahrump. The closest fully equipped hospital is in Las Vegas. How will DOE address the problem of remote and limited emergency response capability (responders and hospitals) along SR 127?

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3. The letter does not address concerns about the poor road conditions of SR 127 and the public health and safety implications of rerouting these shipments onto poorer quality and lesser-maintained rural highways. As we have mentioned, SR 127 was not an engineered route, has several unbanked, unsigned high-speed turns, blind rises, sustained grades in excess of modern standards, and dozens of washes crossing both over and under the pavement. The road doesn't include turnouts or wide shoulders and there are questions about the long-term effect on the road from increased heavy truck usage. How does DOE justify trading off the use of well-maintained interstate and primary highways for more circuitous rural routes that have generally higher accident rates? How does DOE explain their proposed use of less quality roads and increasing the shipping distance even though such rerouting would appear to result in higher estimated public and worker risks than routes through Las Vegas? The interstates and primary highways are better designed and constructed to handle heavy truck traffic (roadbeds, shoulders, etc.) than rural highways. The routes through Las Vegas are shorter than routes that avoid Las Vegas thereby increasing shipping distance. What are the trade-offs from a public health and safety perspective in rerouting these shipments to avoid Las Vegas?
4. Rerouting nuclear waste shipments to avoid shipment through Las Vegas could have implications for LLW shipments to NTS from other generator sites. For example, how will DOE reroute shipments from INEEL to NTS if the intent is to avoid Las Vegas? One option mentioned was that shipments from INEEL to NTS would be routed through Reno, Sacramento, Stockton, and Fresno. What are DOE's plans for routing LLW shipments from other generator sites to NTS? Before moving ahead with these controversial routing plans to avoid Las Vegas, DOE should evaluate the DOE-wide complex implications from diverting these shipments to avoid Las Vegas.

Sincerely,

  
Barbara Byron



## Department of Energy

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# DRAFT

DOE-0289-00

Mr. Robert R. Loux  
Executive Director  
Agency for Nuclear Projects  
1802 N. Carson Street, Suite 252  
Carson City, Nevada 89701

Commissioner Robert Laurie  
California Energy Commission  
1516 Ninth Street  
Sacramento, California 95814-5512

Dear Mr. Loux and Mr. Laurie:

### SHIPMENTS OF LOW-LEVEL RADIOACTIVE WASTE TO THE NEVADA TEST SITE

<sup>update</sup>  
This letter is to ~~inform~~ you of the Department of Energy's (DOE) plans to transport low-level radioactive waste by truck from the Fernald site near Cincinnati, Ohio, to the Nevada Test Site (NTS) near Mercury, Nevada. These shipments are expected to pass through the state of California. A map of the truck routes is enclosed.

Owned by the DOE, the Fernald site is a former uranium and thorium processing facility undergoing cleanup. A significant part of the cleanup effort is the off-site disposal of low-level radioactive waste consisting of construction rubble, debris, trash, residues, and production wastes. Please note that the DOE has worked with regulators and other stakeholders to minimize the volume of waste to be disposed off-site. It is expected that approximately 76 million cubic feet of waste will be generated during future cleanup activities. Of this volume, 67 million cubic feet will be disposed on-site and 15 million cubic feet will be shipped to a commercial disposal facility in Utah. Only a small portion, 1.2 million cubic feet (1.6% of the total volume generated) will be disposed at the NTS.

The DOE has also been working to address transportation concerns raised by stakeholders near the NTS. In response to concerns regarding shipping wastes across the Hoover Dam and through the I-15/US-95 Interchange (known as the "Spaghetti Bowl") near downtown Las Vegas, the Fernald Environmental Management Project (FEMP) had agreed to determine the feasibility of alternate truck routes. While the responsibility and authority for route selection has been assigned to the motor carriers in accordance with Department

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of Transportation (DOT) rules, the FEMP has worked with motor carriers to identify acceptable alternatives. As a result, the FEMP and its motor carriers have agreed to not ship waste over the Hoover Dam or through the Spaghetti Bowl as long as safe alternative routes are available. In order to avoid these areas, truck shipments have been travelling across the country along I-80 to Nevada, then following US highways 93, 6, and 95 to the entrance of the NTS at Mercury, NV. Trucks do not travel through California using this route. However, during the winter months, weather conditions will make it necessary for the motor carriers to utilize more southerly approaches to the NTS.

Beginning in January 2000, trucks will begin to travel cross-country along I-40, entering California near Needles and connecting with US 95 to Clark County, Nevada. Trucks will re-enter California on Nipton Road and connect with I-15. At this point, trucks will travel either north on I-15 back into Nevada and connect with Nevada route 160 to US 95 to the NTS, or they will drive south to CA 127 at Baker. The trucks will go north on CA 127 to Nevada, continuing on NV 373 to US 95 to the NTS. Road and weather conditions permitting, the FEMP anticipates that in the future the motor carriers will utilize these southern routes during the winter (November through April) and the northern approach during the summer (May through October).

During 2000, the FEMP plans to use three motor carriers; two will be using the CA 127 route and one will be using the NV 160 route. However, the number of trucks travelling along each route will be about the same. Typically, the number of shipments leaving Fernald destined for the NTS during any given week ranges from zero to fifteen. Bad weather or other special conditions may cause a particular route to not be used for a period of time. For example, CA 127 is subject to occasional flash flooding and seasonal peak tourist traffic. Motor carriers will be advised to not use this route during these events. Please note that the FEMP requires all trucks carrying waste to the NTS to be equipped with satellite tracking and communication units so that they can be notified at any time of emergency conditions such as flash floods.

Trucks transporting the waste will be designated "exclusive use," as referenced in 49 CFR Part 173.403, and will carry only low-level radioactive waste. The waste will be mostly trash, rubble, and debris from the environmental cleanup activities as well as process residues (i.e. wastes and leftover process materials and wastes from the former production operations) contaminated primarily with uranium and thorium. It is expected that the wastes will generally be classified as low-specific activity (LSA-I and LSA-II) per DOT regulations. The estimated maximum dose rate from uranium will be 1-2 millirem per hour on contact with the truck, while the estimated maximum dose rate for thorium will be 5-10 millirem per hour two meters from the truck. The DOT limit for a vehicle transporting radioactive material by exclusive use shipment is 10 millirem per hour at two meters from the transport vehicle. Proper DOT labels and placards will be clearly displayed on the containers and on the trucks. In addition, prior to departure, Fernald will conduct thorough radiation and contamination surveys of the containers and trucks to ensure they meet DOT

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shipping requirements for radioactive materials. In case of an emergency, the motor carrier will immediately notify the state and local authorities, as well as emergency management personnel at Fernald. The DOE and the Fernald remediation contractor, Fluor Daniel Fernald (FDF), will make necessary notifications and provide emergency response assistance.

If you have any questions regarding Fernald low-level waste shipments, please contact John Sattler of my staff at (513) 648-3145.

Sincerely,

FEMP:Sattler

Jack R. Craig  
Director

Enclosure

cc:

C. Gertz, DOE-NVO

D. Lee, DOE-OH

Ron Ross, WGA

SSEB

Inyo County

San Bernardino County

L. Bradshaw, Nye County

Lincoln County

J. Costello, White Pine County

Elko County